In the Claims

1. (Currently amended) A carrier device for use in an antibiotic susceptibility test ("AST"), the device releasably carrying an antibiotic related to the test, and bearing machine readable information concerning the antibiotic, wherein the device also includes orientation means for enabling an image ~~analyser~~ analyzer to determine an optimal reading direction of the readable information, the device is an AST disk, the ~~meachine~~ machine readable information comprises a code of one or more letters and one or more numerals and wherein the orientation means comprises means other than said code.

2. (Cancelled)

3. (Original) A device according to claim 1, in which the orientation means is separate from said machine readable information.

4. - 5. (Cancelled)

6. (Currently amended) A device according to claim 1, in which the ~~orienation~~ orientation means comprises an arrangement of information presented on the device surface, in addition to the code.

7. (Previously presented) A device according to claim 1, in which said orientation means comprises linearly-arranged information.

8. (Original) A device according to claim 7, wherein said linearly-arranged information is parallel to the optimal reading direction of the readable information.

9. (Previously presented) A device according to claim 7, wherein said linearly-arranged information is a printed line or lines, printed below or above code.

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10. (Previously presented) A device according to claim 9, wherein said orientation means comprises an underline printed beneath the code.

11. (Previously presented) A device according to claim 1, in which said code identifies said substance and/or its concentration.

12. (Previously presented) An image analysis system for interpreting AST plates, each of which holds a plurality of devices each in accordance with claim 1, the system comprising:

support means for supporting an AST plate;

camera means for imaging a plate supported by said support means; and

electronic information processing means, linked to said camera means, programmed or trained to

locate an AST disk on said plate from among the plurality of AST disks,

identify orientation means on the located disks,
and rotate the perceived image of the located disks as
required so that the perceived image of a multi-character
code printed on the device is brought into alignment with
a proper reading direction for the code, and
read the code.

13. (Previously presented) An image analysis system according to claim 12, which additionally determines the size of the zone of inhibition, if any, surrounding an AST disk.

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14. (Previously presented) An analysis system according to claim 13, wherein the electronic information processing means includes or is linked to an expert system comprising a database of AST characteristics of known micro-organisms.

15. (Previously presented) An analysis system according to claim 13 including display means for displaying an AST disk image.

16. (Previously presented) An analysis system according claim 13 wherein the diameter of the zone of inhibition is determined.

17. (Previously presented) An analysis system according to claim 13 wherein the system is programmed or trained to identify orientation means which comprises an underline printed beneath the multi-character code.

18. (Currently amended) An image ~~analyser~~ analyzer for use in determining the result of antibiotic susceptibility testing of micro-organisms on a culture medium, comprising:

    a)   camera means for viewing the culture medium;

    b)   electronic information processing means, linked to said camera means, programmed or trained to interpret any region of visibly altered micro-organism growth in the vicinity of a susceptibility testing device, comprising an AST disk according to claim 1 present on the culture medium, wherein said processing means is also programmed or trained to read said code on the disk indicative of the susceptibility reagent in the device and to interpret orientation means incorporated in or on the disk by which the optimal reading direction of the code can be ~~recognised~~ recognized, and to adjust as necessary the actual reading direction to bring the actual reading direction into line with the actual orientation of the character code on the device.

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